

Homework 5

Due via email by 8:00pm on Tuesday April 21

1. (Like problem 6 on the consumption smoothing worksheet). Assume 10 periods (the current period is 0, plus there are 9 additional periods 1 through 9). Your country has no capital controls and people in the country can freely borrow and lend in world financial markets at the world interest rate  $r^*$ . In the face of each of the following kinds of negative shocks, how would your country adjust its gross national expenditure and trade balance in response?
  - a. The shock is country-specific and temporary (e.g., GDP falls by 100 in the current period only)
  - b. The shock is country-specific and permanent (e.g., GDP falls by 100 in all periods)
  - c. The shock is temporary but affects all countries. (In this case, a variable we have until now treated as exogenous will change. What variable is that? How does it change? Briefly explain.)
  
2. In microeconomics, we learn that well-functioning markets allow for the most efficient possible allocation of resources. In finance, we learn that well-functioning financial markets allow people to reallocate their consumption over time in a way that raises their well-being (relative to if they could not use financial markets for this purpose). As we have discussed, people generally prefer smooth consumption to volatile consumption, so they would save when income is temporarily high and dissave (or borrow) when income is temporarily low. At the global level, international financial markets allow countries to smooth their spending over time, though external saving and dissaving in the face of country-specific income shocks. Unfortunately, not all countries have perfect capital mobility (perfect capital mobility means no capital controls, so that everyone can freely borrow or lend in international financial markets), and not all shocks are country-specific.
  - a. Suppose we could divide countries into two groups:
    - Group A includes countries that have a high degree of financial openness, meaning perfect capital mobility and no capital controls.
    - Group B includes countries that have a low degree of financial openness, meaning countries with capital controls and limits on cross-border borrowing/lending/investing.Which do you think would be higher, the volatility of consumption in the average Group A country, or the volatility of consumption in the average Group B country? Briefly explain.
  - b. In part a, you made a prediction about the relationship between financial openness and consumption volatility. One section of Chapter 6/17 presents evidence on this relationship. Tell me on what page can I find this evidence, and try to summarize it in a sentence or two of your own words.